

EPA National Estuary Program



Photo credit: Bryon Chamberlin

Federal Panel Presentation for Congressional Estuary Caucus

March 30, 2017

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Photo credit: Nanette O'Hara

Estuary Values

Supply nurseries for over 75% of our commercial fish catch and 80-90% of the recreational fish catch worth billions of dollars.

A RAE presentation (see http://www.habitat.noaa.gov/pdf/RAE_Restoration_Jobs.pdf) which cited Feierabend, S.J. and J.M. Zelazny. 1987. Status Report on our Nation's Wetlands. National Wildlife Federation: Washington, DC.



43% of the U.S. population reside in coastal areas.

Provide 40% of U.S. employment.

Generate 49% of GDP

Employs 13.5 million people in the tourism industry



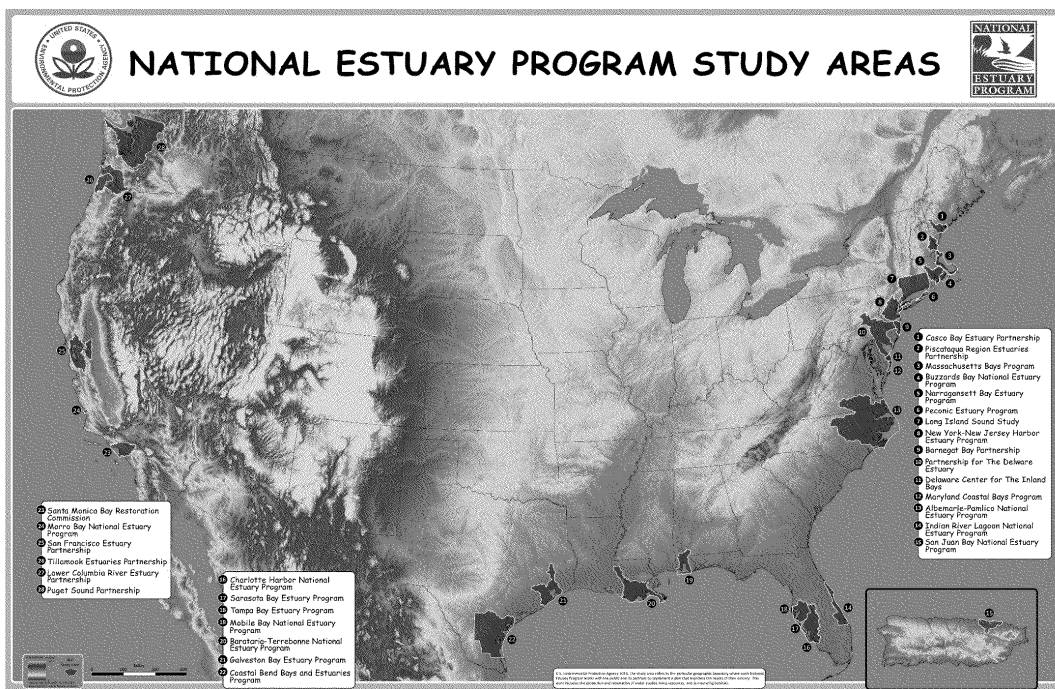
Photo credit: Eric Vance, EPA

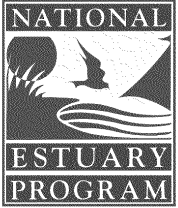
Linwood Pendleton (2007) The Economic & Market Value of America's Coasts and Estuaries: What's At Stake. Chapter 3. "The Value of Estuary Regions in the U.S. Economy". Colgan, Charles, University of Southern Maine.

Sea Grant's 2014-2017 Strategic Plan, see <https://www.noaa.gov/media/CurrentFocusAreas/ResilientCoastalCommunities/2014-2017-Strategic-Plan>

National Estuary Program Sec. 320 CWA (1987)

- Protection of public water supplies;
- Protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife;
- Allows for recreational activities, in and on water; and
- Control of point and nonpoint sources of pollution.





NEP Program Delivers Results

Effective: NEPs have protected & restored over 2 million acres of habitat since 2000

Efficient: On average NEPs have leveraged \$19 for every \$1 provided by EPA.



Photo credit: Tampa Bay Estuary Program

Current Challenges for our Estuaries



- Habitat loss and degradation
- Excess nutrients
- Toxic Chemicals
- Emerging Contaminants
- Harmful algal blooms
- Pathogens
- Invasive species
- Climate stressors

Underlying issue is population density. More than half the population in the continental U.S. lives in the coastal zone-- only 17% of the land area.

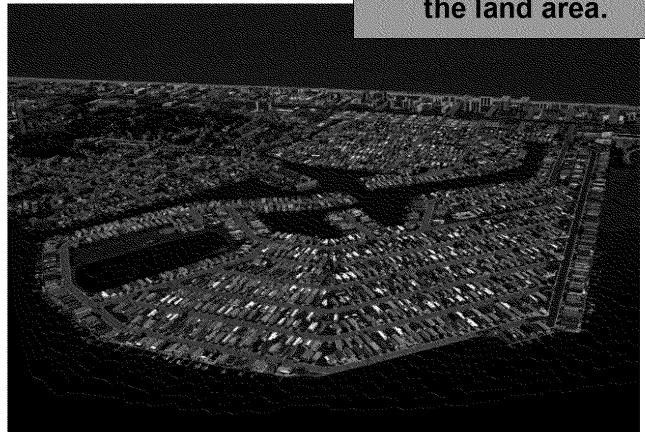


Photo credit: Andy Serrell

Clean Water Act



- Water Infrastructure and Resiliency Finance Center / CW State Revolving Funds
- Nutrient Management
- Stormwater Management & Green Infrastructure
- Nonpoint Source Pollution: 319 Grants
- WQ Monitoring
- Coastal Wetlands Initiative
- Climate Ready Estuaries

Tampa Bay Estuary Nutrient Reductions



- Goal: Restore seagrass to 1950 levels after decades of decline
- Tampa Bay Nutrient Management Consortium
 - Implemented over 500 nutrient reduction projects
- As of 2016, Bay had 41,655 acres of sea grasses; a recovery of almost 16,000 acres of seagrass since 1992
- **More than 1200 acres above 1950s levels.**

Santa Monica Bay Stormwater Management/Green Infrastructure



- Leveraged a \$18 mill state bond act for stormwater projects that implement Bay Restoration Plan (CCMP).
 - City of Torrance Storm Water Basin Enhancement
 - City of Calabasas Catch Basin Trash Inserts
 - City of Los Angeles University Park Rain Gardens
 - Milton Park Green Street Storm Water BMPs
 - County of Los Angeles Oxford Basin Enhancement

Piscataqua Regional Estuaries Partnership



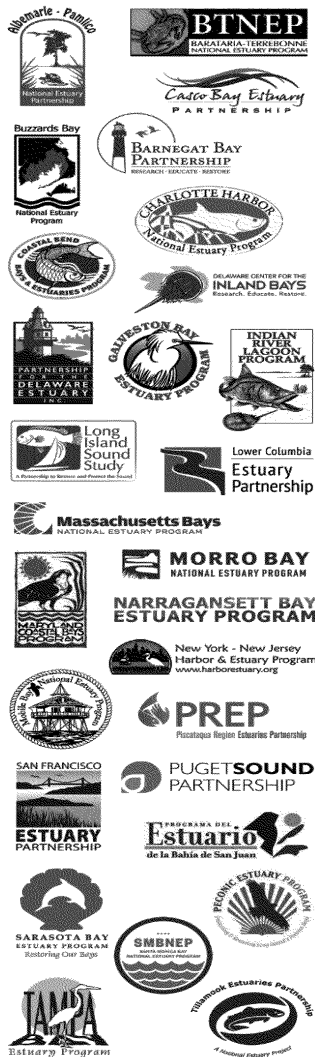
- Shared Estuarine and Near-shore Monitoring Program
 - NH Coastal Program (CZM)
 - Great Bay NERR
 - NH Sea Grant
 - NERACOOS (Northeast Regional Assn of Coastal Ocean Observing Systems)
- Cost effective partnership resulted in a New Hampshire \$260K capital budget investment.



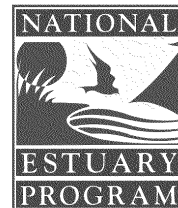
Barnegat Bay Partnership



- Partnership with Jacques Cousteau NERR
 - Comprehensive assessment and management workshops
 - Compiled the Barnegat Bay's 1st Science Prospectus in 2010.
 - Informed Governors' Initiative for Barnegat Bay.



National Estuary Program



- Watershed approach
- Extensive Public participation
- Collaborative problem-solving
- Science based decision making



THANK YOU!